

<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER 040285PCTUS  U.S. APPLICATION NUMBER (37 CFR 1.5) <b>107593249</b>
INTERNATIONAL APPLICATION NO. PCT/US2004/011796	INTERNATIONAL FILING DATE 16.04.2004	PRIORITY DATE CLAIMED 18.04.2003
TITLE OF INVENTION Three-Dimensional, Flexible Cell Growth Substrate and Related Methods		
APPLICANT(S) FOR DO/EO/US Philip R. LeDuc, James D. Kubicek and Stephanie Brelsford		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371. 3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. <input type="checkbox"/> The US has been elected (Article 31). 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). b. <input checked="" type="checkbox"/> has been communicated by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). a. <input type="checkbox"/> is attached hereto. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). 7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).		
<b>Items 11 to 20 below concern document(s) or information included:</b>		
11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input type="checkbox"/> A preliminary amendment. 14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76. 15. <input type="checkbox"/> A substitute specification. 16. <input type="checkbox"/> A power of attorney and/or change of address letter. 17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825. 18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4). 19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).		

JC09 Rec'd PCT/PTO 17 OCT 2005

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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U.S. APPLICATION NO. (if known) <b>10/553249</b>		INTERNATIONAL APPLICATION NO. PCT/US2004/011796		ATTORNEY'S DOCKET NUMBER 040285PCTUS	
20. Other items or information:					
The following fees have been submitted				CALCULATIONS PTO USE ONLY	
21. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.492(a))..... \$300				\$ 300.00	
22. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c))				\$ 200.00	
If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)..... \$0					
All other situations..... \$200					
23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b))				\$ 400.00	
If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)..... \$0					
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority..... \$100					
International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB..... \$400					
All other situations..... \$500					
TOTAL OF 21, 22 and 23 =				\$900.00	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
- 100 =	/50 =		x \$250	\$	
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	
Total claims	157 - 20 =	137	x \$ 50	\$ 6,850.00	
Independent claims	9 - 3 =	6	x \$200	\$ 1,200.00	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360	\$	
TOTAL OF ABOVE CALCULATIONS =				\$ 8,950.00	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.					
SUBTOTAL =				\$ 4,475.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$	
TOTAL NATIONAL FEE =				\$ 4,475.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$	
TOTAL FEES ENCLOSED =				\$ 4,475.00	
				Amount to be refunded:	\$
				Amount to be charged	\$

10/553249

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- a. ☒ A check in the amount of \$ 4,475.00 to cover the above fees is enclosed.
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A duplicate copy of this sheet is enclosed.
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**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

## SEND ALL CORRESPONDENCE TO:

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SIGNATURE  
Christine R. Ethridge

NAME  
30,557

REGISTRATION NUMBER

IN THE UNITED STATES RECEIVING OFFICE

In re application of :  
LeDuc et al. : THREE-DIMENTIONAL, FLEXIBLE CELL GROWTH  
: SUBSTRATE AND RELATED METHODS  
International Application No. :  
PCT/US2004/011796 :  
International Filing Date :  
16 April 2004 : Agent Docket No.  
040285PCTUS

EXPRESS MAIL CERTIFICATE

Pittsburgh, Pennsylvania 15222  
October 17, 2005

Mail Stop: PCT  
Commissioner for Patents  
P.O. Box: 1450  
Alexandria, VA 22313-1450

"Express Mail" label number EQ085320351US

Date of Deposit October 17, 2005

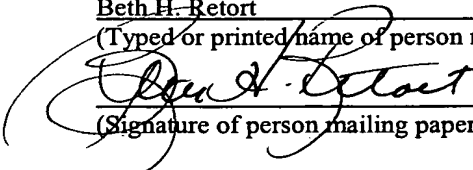
I hereby certify that the following attached paper(s) or fee:

- TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE CONCERNING A FILING UNDER 35  
U.S.C. 371 (In duplicate- please to charge any additional fees to Deposit  
Account);
- CHECK PAYABLE TO PTO

are being deposited with the United Postal Service "Express Mail Post Office to Addressee"  
service under 37 CFR 1.10 on the date indicated above and is addressed to **Mail Stop: PCT,**  
**Commissioner for Patents, P.O. Box: 1450, Alexandria, VA 22313-1450.**

Beth H. Retort

(Typed or printed name of person mailing paper or fee)

  
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